

Translation

PATENT COOPERATION TREATY

PCT/EP2003/007113



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference 27967P WO | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | |
| International application No. PCT/EP2003/007113 | International filing date (day/month/year) 03 July 2003 (03.07.2003) | Priority date (day/month/year) 19 July 2002 (19.07.2002) |
| International Patent Classification (IPC) or national classification and IPC C08G 77/38 | | |
| Applicant DEGUSSA INITIATORS GMBH & CO. KG | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 2 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

| | |
|---|--|
| Date of submission of the demand 27 November 2003 (27.11.2003) | Date of completion of this report 15 December 2004 (15.12.2004) |
| Name and mailing address of the IPEA/EP | Authorized officer |
| Facsimile No. | Telephone No. |

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/007113

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages 1-12, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages 2-6, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages 1, 7-10, filed with the letter of 06 December 2004 (06.12.2004)
- ☐ the drawings:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/07113

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

| | | | |
|-------------------------------|--------|------|-----|
| Novelty (N) | Claims | 1-10 | YES |
| | Claims | | NO |
| Inventive step (IS) | Claims | 1-10 | YES |
| | Claims | | NO |
| Industrial applicability (IA) | Claims | 1-10 | YES |
| | Claims | | NO |

2. Citations and explanations

Having studied the submitted set of amended claims together with the applicant's comments, the Examining Section is of the opinion that the subject matter of the current claims 1 to 10 can be considered novel and inventive for the following reasons:

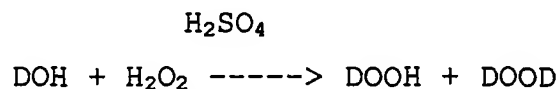
The feature whereby the mixture of concentrated hydrogen peroxide and concentrated mineral acid is presented and the polyol to be peroxidized is introduced into this mixture has been added to claim 1. The newly introduced feature is important for preventing the formation of undesired byproducts.

Citation D1 (US-A-2 963 501) discloses the synthesis of organosiloxanes containing peroxy substituents which are connected to the silicon by way of a silicon-carbon bond. Each of the peroxy groups has the configuration (column 2, lines 19 to 29):



in which C is a tertiary carbon atom.

The siloxane peroxides can be produced by reacting a siloxane alcohol with sulphuric acid to form a sulphate, and reacting the latter with concentrated hydrogen peroxide (examples 1 and 7), according to the equation (column 2, lines 33 to 58):



in which D can be a polysiloxane (column 4, line 10). DOH can be produced by reacting copolymeric siloxane, in which at least one silicon per molecule has a hydrogen atom bound thereto, with unsaturated alcohol (column 4, lines 40 to 43; examples 1 and 7).

In such a procedure, the elimination of water from the peroxide present could not be prevented, such that product mixtures which would be totally unsuitable as copolymerization initiators would be produced.

Thus D1 contains nothing to suggest to a person skilled in the art how the disruptive formation of homopolymers during copolymerization might be prevented. Therefore claims 1 to 10 also meet the PCT novelty and inventive step requirements (PCT Article 33(1) to (3)).